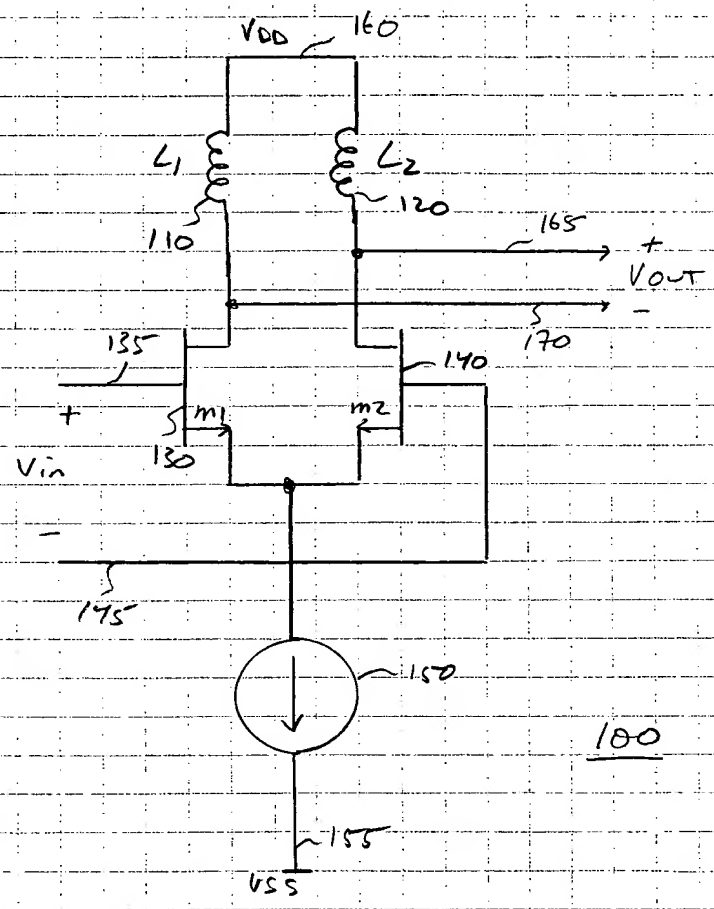
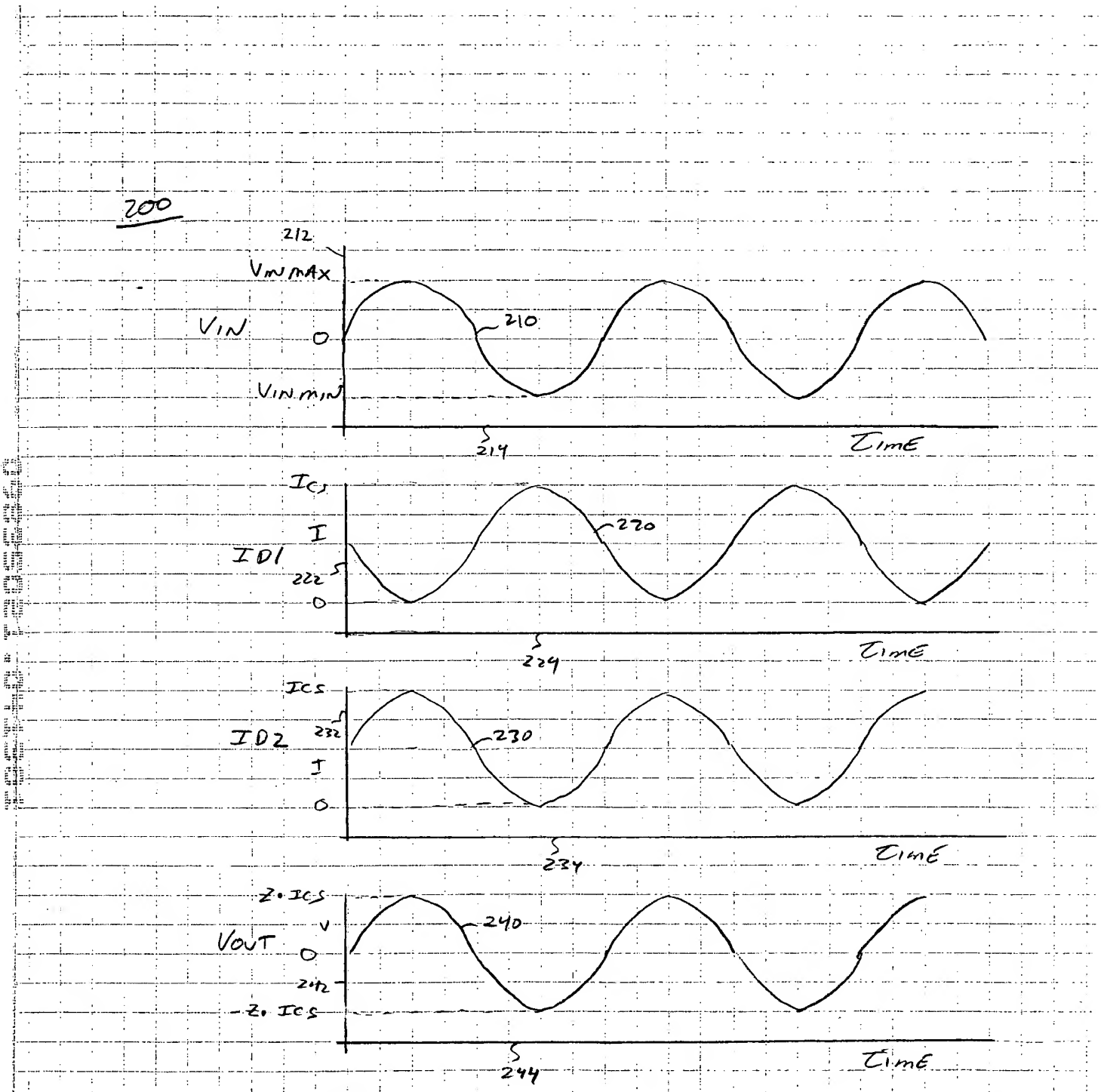


PRIOR ART

FIGURE 1



FOR OUTPUT SWING = $2 \cdot Z \cdot I_{CS}$

POWER = $V_{DD} \cdot I_{CS}$

PRIOR ART

FIGURE 2

300

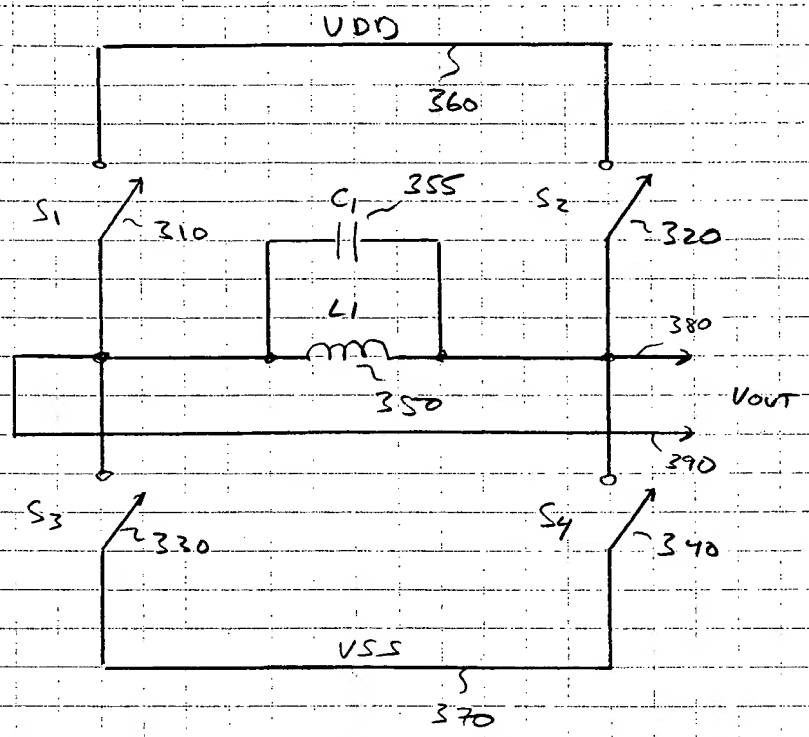

VDD
360
S1
310
C1
355
S2
320
L1
380
350
VOUT
390
S3
330
S4
340
VSS
370

FIGURE 3

400

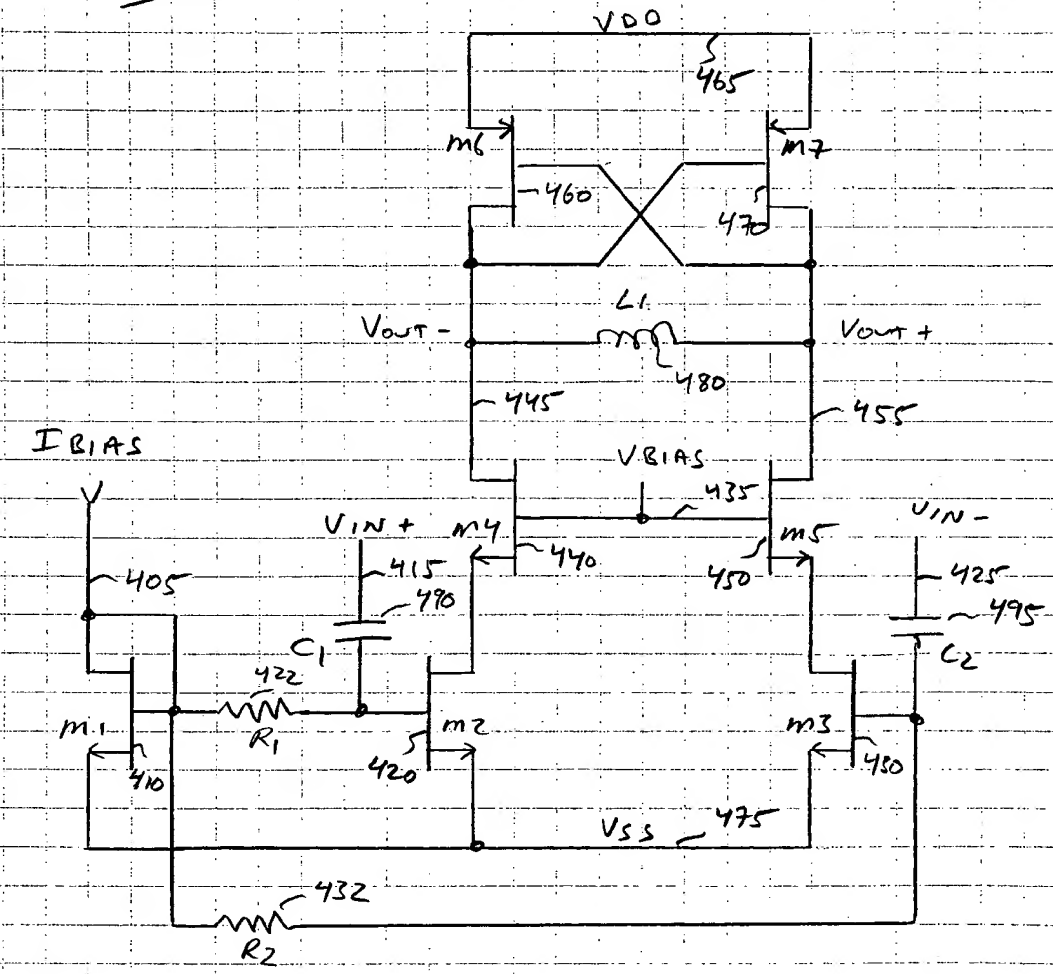

VDD
465
m6
m7
460
470
L1
VOUT -
VOUT +
480
445
455
IBIAS
VBIAS
435
VIN +
m4
440
m5
VIN -
405
415
450
425
490
495
C1
C2
422
m1
R1
m2
m3
410
420
480
VSS
475
432
R2

FIGURE 4

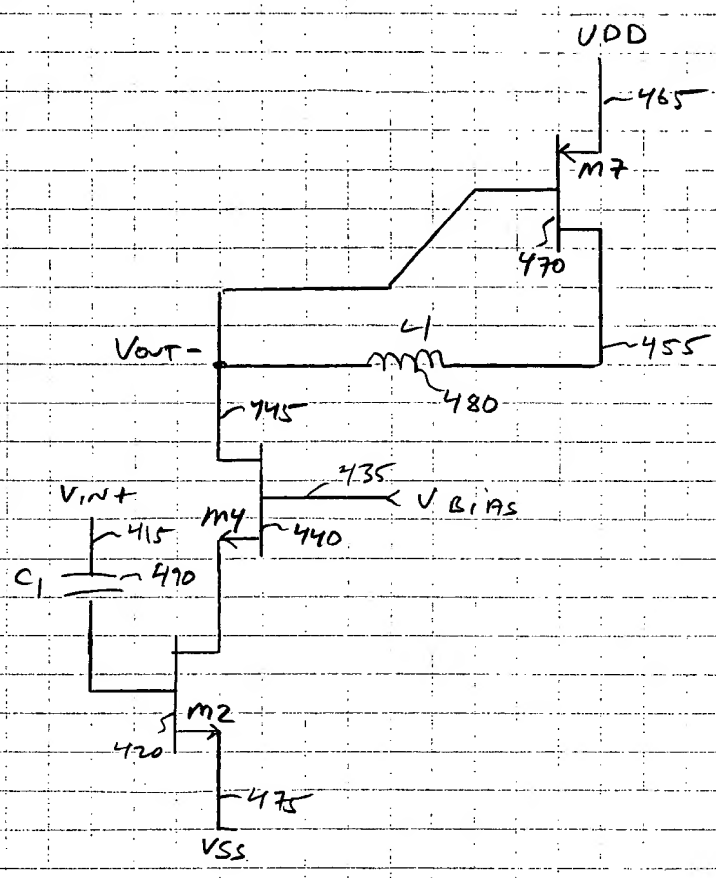

VDD
465
M7
470
L1
455
VOUT-
480
445
435
VBIAS
VIN+
M4
440
415
C1
490
M2
420
475
VSS

FIGURE 5

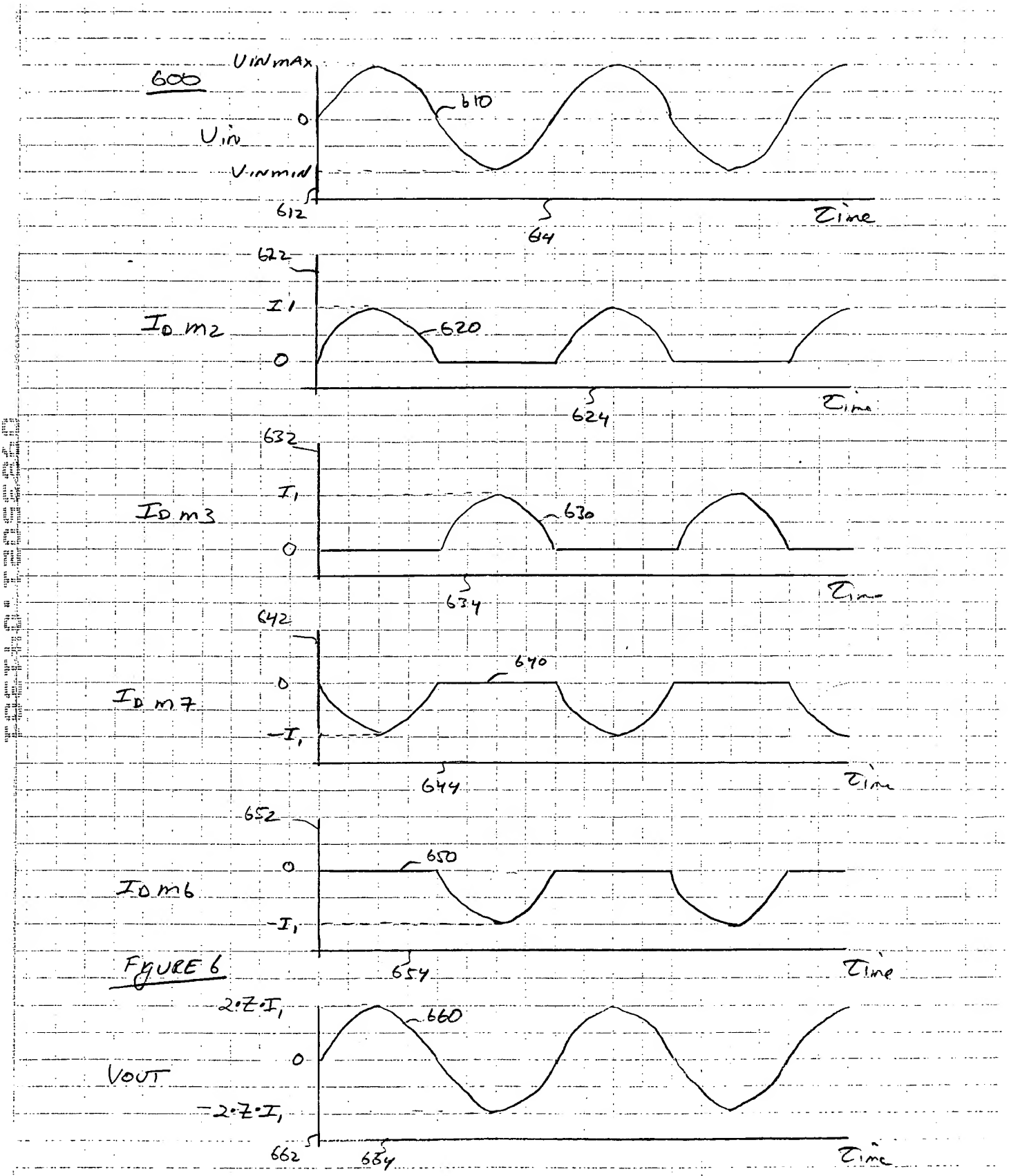

600
$V_{IN\,MAX}$
0
V_{in}
$V_{IN\,MIN}$
610
612
64
Time
622
I_1
0
$I_{D\,m2}$
620
624
Time
632
I_1
0
$I_{D\,m3}$
630
634
Time
642
0
$-I_1$
$I_{D\,m7}$
640
644
Time
652
0
$-I_1$
$I_{D\,m6}$
650
654
Time
$2.7 \cdot I_1$
0
$-2.7 \cdot I_1$
V_{OUT}
660
662
634
Time

FIGURE 6

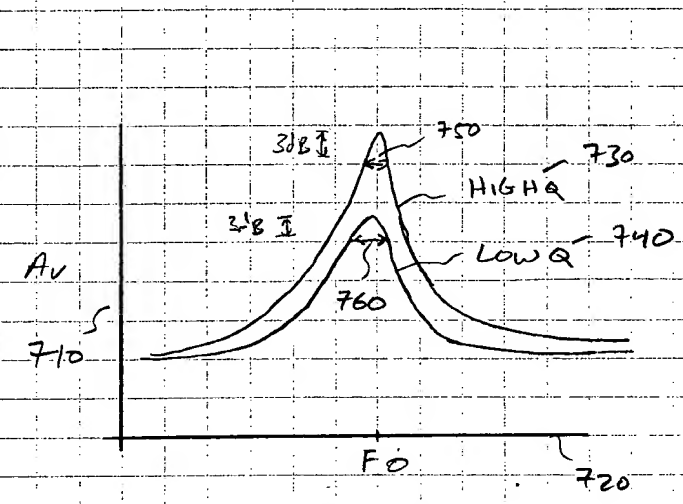


FIGURE 7

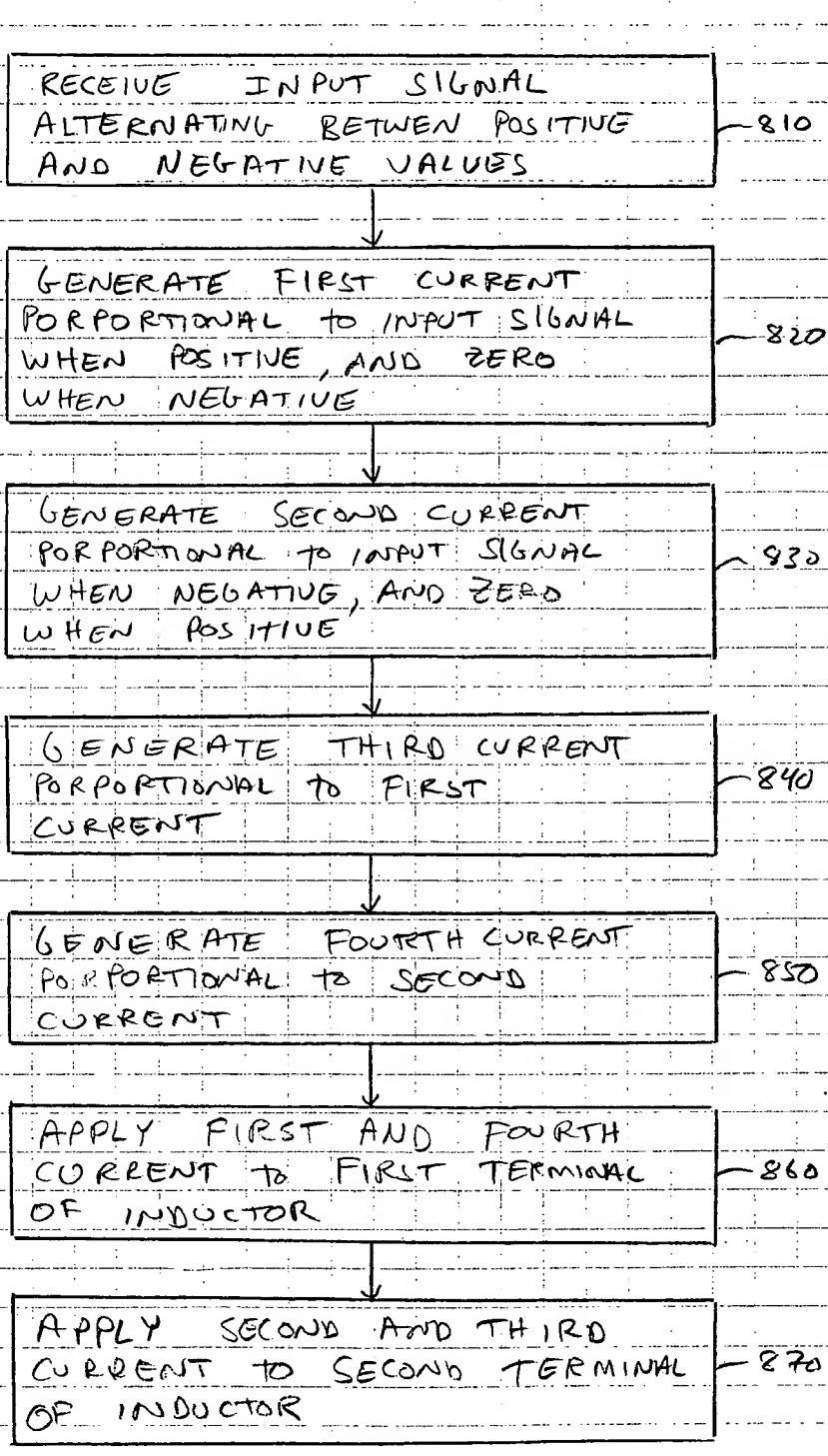

800
RECEIVE INPUT SIGNAL ALTERNATING BETWEN POSITIVE AND NEGATIVE VALUES
810
GENERATE FIRST CURRENT PORPORTIONAL TO INPUT SIGNAL WHEN POSITIVE, AND ZERO WHEN NEGATIVE
820
GENERATE SECOND CURRENT PORPORTIONAL TO INPUT SIGNAL WHEN NEGATIVE, AND ZERO WHEN POSITIVE
830
GENERATE THIRD CURRENT PORPORTIONAL TO FIRST CURRENT
840
GENERATE FOURTH CURRENT PORPORTIONAL TO SECOND CURRENT
850
APPLY FIRST AND FOURTH CURRENT TO FIRST TERMINAL OF INDUCTOR
860
APPLY SECOND AND THIRD CURRENT TO SECOND TERMINAL OF INDUCTOR
870

Figure 8

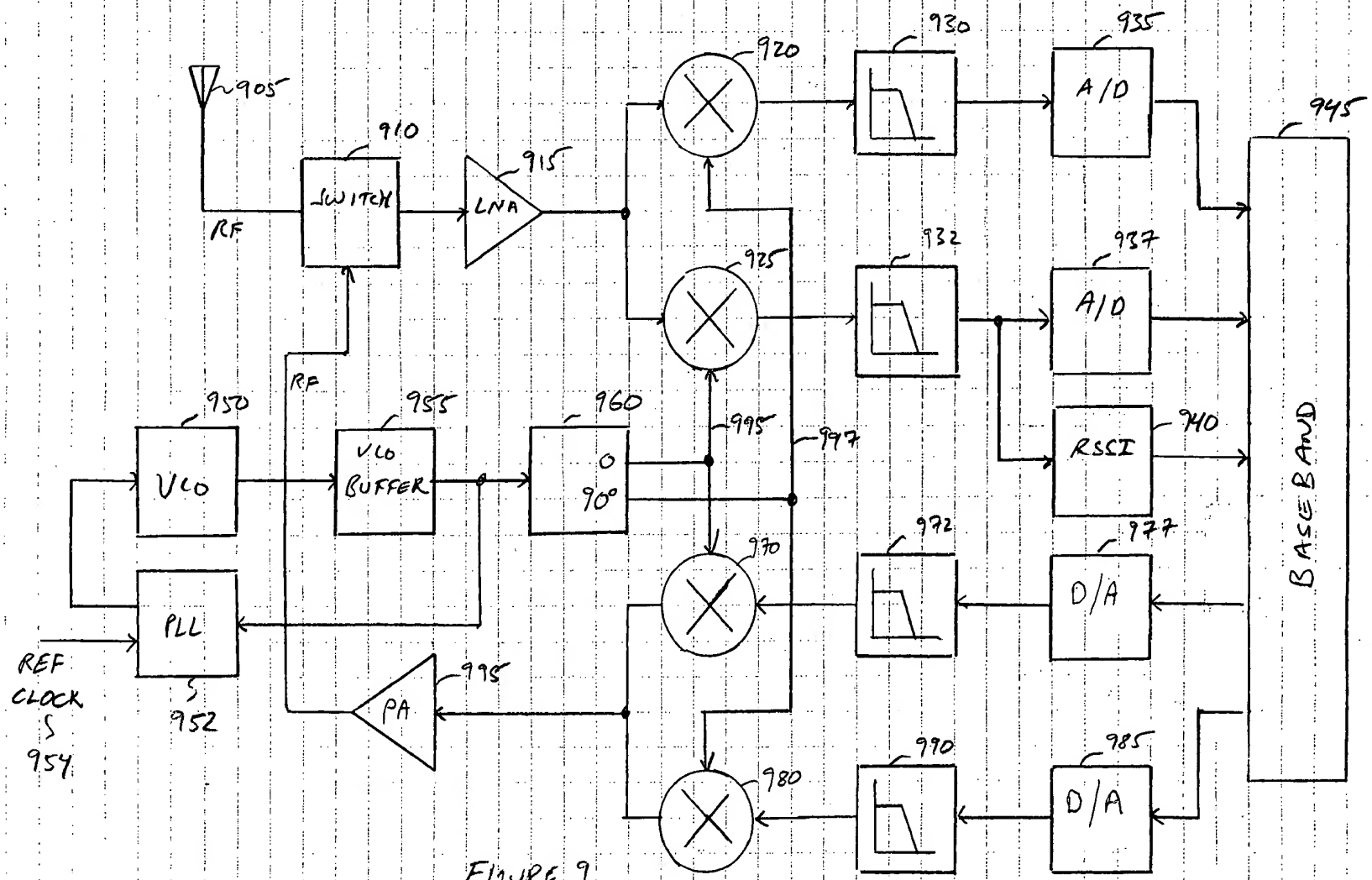

905
910
SWITCH
915
LNA
RF
920
930
935
A/D
945
925
932
937
A/D
RF
950
955
960
VCO
VCO BUFFER
0
90°
995
997
940
RSSI
970
972
977
D/A
PLL
REF CLOCK
954
952
998
PA
980
990
985
D/A
BASEBAND

FIGURE 9

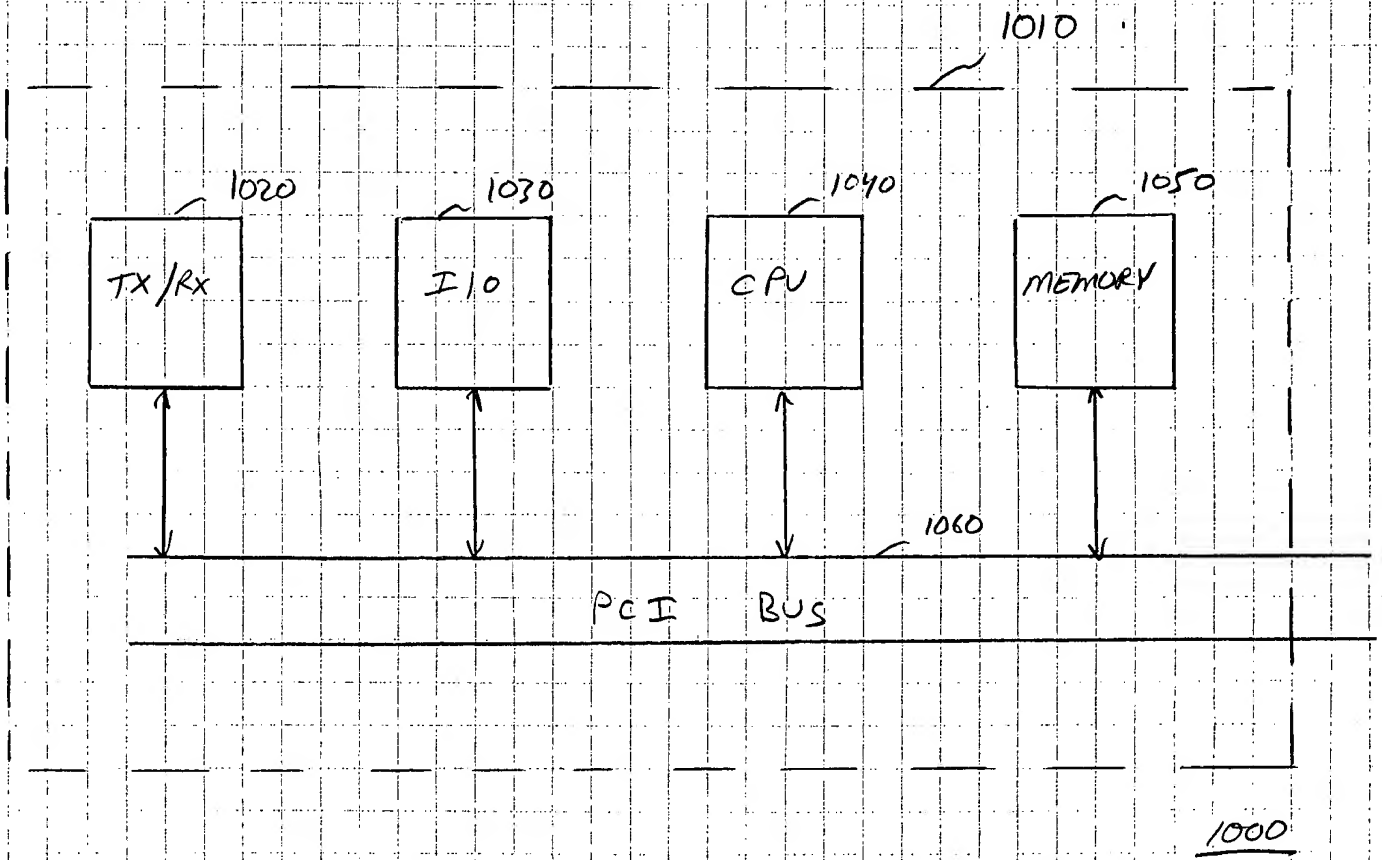


FIGURE 10